

# PATENT SPECIFICATION

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## COMPLETE SPECIFICATION

### DRAWINGS ATTACHED

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## Improvements relating to Fibreboard Trays and Blanks for making same

We, ALLIANCE BOX COMPANY LIMITED, a British Company, of Warrington, Lancashire, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed to be particularly described in and by the following statement:—

This invention relates to trays constructed from fibreboard and suitable for horticultural purposes and to blanks for making same.

The object of the invention is to provide a blank which, when folded, forms a tray of extremely strong construction having corner formations on which further trays can be stacked.

According to the invention, the tray blank comprises a centre portion forming the base of the tray, flaps hinged to the longer sides of the base adapted to be folded over to form side walls with adjoining end portions extending above the height of the side walls, and flaps hinged to the shorter sides of the base adapted to be folded over to form end walls and having portions at the ends of the flaps adapted to be folded in on themselves to form corner pillars standing above the side and end walls in the corners formed by the end portions of the longer side flaps which project above the pillars.

The side wall flaps may have tabs at their outer edges, which when the flaps are folded over engage in apertures formed adjacent the hinge line between the flaps and the base, to lock the side walls in position. The portions at the ends of the side wall flaps may have projecting tongues over which the end walls are folded.

The trays can be stacked one another to provide additional ventilation if required, using the corner pillars as supports and the erect corner portions to maintain the stack in alignment. They may be made of solid or corrugated fibreboard, and of water-resistant

or water-proofed material.

In the accompanying drawings:—

Figure 1 shows a plan view of a blank according to the present invention which is used for forming a tray, and

Figure 2 is a perspective view of a corner of an assembled tray formed from the blank shown in Figure 1.

In carrying the invention into effect according to one convenient mode, by way of example, the blank shown in Figure 1 is adapted to form a rectangular tray having opposed side and end walls. For convenience and clarity, only one side and end wall will be specifically described in relation to the associated base, it being obvious from Figure 1 that the other walls are identically formed. Fold and cut lines are shown by broken and solid lines, respectively.

The blank comprises side wall flaps 1, 2, which are divided from one another by longitudinally extending fold lines 3, and are connected by a fold line 4 to a central portion or base member 5. The wall flap 2 has tabs 6 formed on its outer edge which, when the tray is assembled, are adapted to engage in apertures 7 positioned adjacent the fold line 4.

The side wall flap 1 has a semi-circular configuration 8 adjacent each end extending above the fold lines 3 which is divided by a fold line 9 to form portions 10, 11, which are adapted to provide the outside corners of the assembled tray. The corner portion 11 has a protruding tang 12 which is used during assembly of the tray to lock the side walls in position.

End wall portions 13, 14, which are divided by fold lines 15 are connected by a fold line 16 to the base 5. The ends of the wall portion 14 each include pillar portions 17 formed by transversely extending fold lines 18, which when folded over on them-

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selves are adapted to provide a triangular support pillar having an upper surface formed by an outer ledge 19 of the portions 17.

- 5 To construct a tray from the blank described above, each side wall portion 2 is folded inwardly along its fold lines 3 so that it lies adjacent the side wall portion 1 and both portions 1, 2 are then folded along the fold line 4 so that they are perpendicular to the base 5 with the tabs 6 engaging the apertures 7. Each corner portion 8 is then folded along its fold line 9 until the tang 12 is positioned in line with the end wall 15 fold line 16.

- Next, the pillar portions 17 are folded along their fold lines 18 from the outside towards the centre of the end wall so as to form a pillar of triangular cross-section. The end wall portion 13 is then folded upwardly along its hinge line 16 until it is perpendicular to the base 5 and lies adjacent the tang 12. The end wall portion 14 is then folded inwardly along its fold lines until it is positioned perpendicular to the base 5 and lies adjacent the portion 13 with the tang 12 positioned therebetween. The folded pillar portions 17 are thus positioned in the corners of the tray with the edges 19 positioned uppermost to provide a supporting surface as shown in Figure 2.

- It will be appreciated that the trays so formed may be stacked with the base of one tray nestling upon the triangular corner pillars of the adjacent lower tray, whilst the upstanding corners maintain the stacked

trays in alignment.

#### WHAT WE CLAIM IS:—

1. A tray blank comprising a centre portion forming the base of the tray, flaps 40 hinged to the longer sides of the base adapted to be folded over to form side walls with adjoining end portions extending above the height of the side walls, and flaps hinged to the shorter sides of the base adapted to be 45 folded over to form end walls and having portions at the ends of the flaps adapted to be folded in on themselves to form corner pillars standing above the side and end walls in the corners formed by the end portions 50 of the longer side flaps which project above the pillars.

2. A tray blank as claimed in claim 1, wherein the side wall flaps are provided with tabs at their outer edges which, when the 55 flaps are folded over, engage in apertures formed adjacent the hinge line between the flaps and the base to lock the side walls in position.

3. A tray blank as claimed in claim 1 or 60 2, wherein the portions at the ends of the side wall flaps each have a projecting tang over which the end walls are adapted to be folded.

4. A tray blank substantially as described 65 with reference to Figure 1 of the accompanying drawings.

5. A tray when formed from a blank as claimed in any of the preceding claims.

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964,940 COMPLETE SPECIFICATION

1 SHEET

This drawing is a reproduction of the Original on a reduced scale.

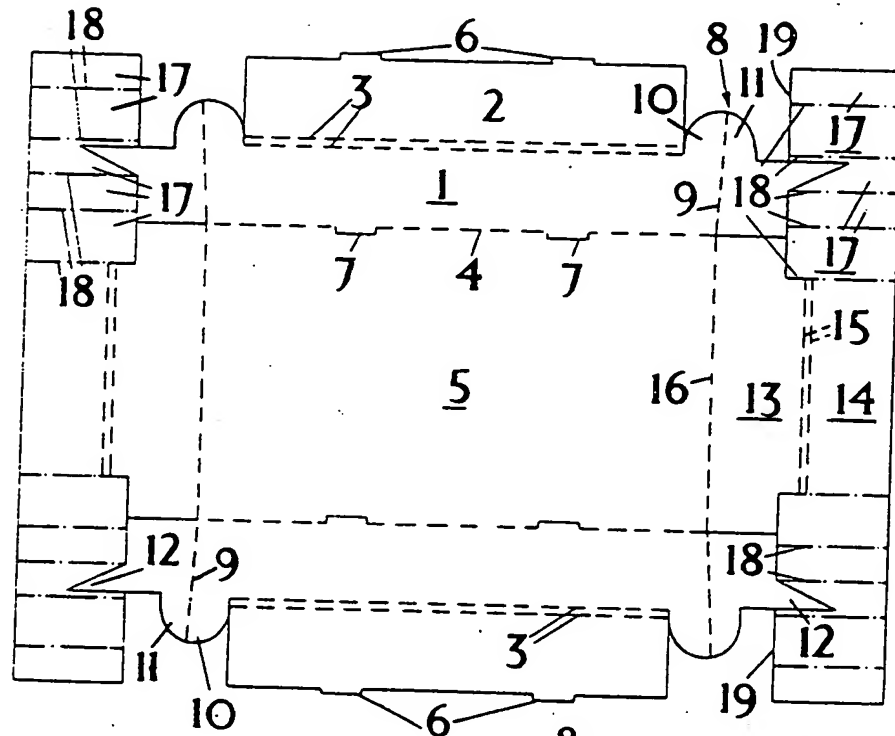


FIG. 1.

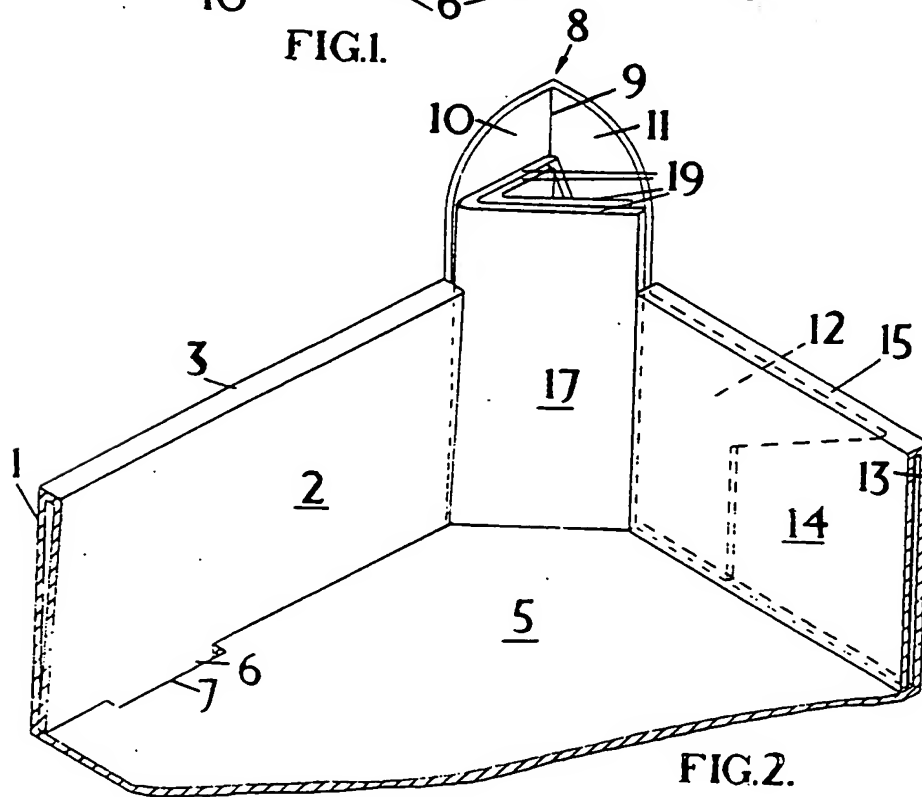


FIG. 2.

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